

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE NORTHERN DISTRICT OF OHIO
3 EASTERN DIVISION

4 PIERRE HODGINS,)
5 Plaintiff,)
6 vs.) No. 1:02-CV-1454
7 CARLISLE ENGINEERED)
8 PRODUCTS, INC., et al.,)
9 Defendants.)

ORIGINAL

10 A P P E A R A N C E S

11 VIA VIDEO CONFERENCE:
12 D. DAVID ALTMAN COMPANY
13 BY: D. David Altman, Esquire
14 12 East Eighth Street, Suite 200
15 Cincinnati, Ohio 45202
16 513-721-2180
17 Attorneys for Plaintiff;

18 VIA VIDEO CONFERENCE:
19 VORYS, SATER, SEYMOUR & PEASE
20 BY: Marcel C. Duhamel, Esquire
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23 Cleveland, Ohio 44114-1724
24 216-479-6100
25 Attorneys for Defendants.

20 DEPOSITION OF PETER THORNE, M.S., PH.D.,

21 taken pursuant to notice and agreement of the
22 parties, at the University of Iowa, 23 Lindquist
23 Center South, Video Conference Room, Iowa City, Iowa,
24 on June 6, 2006, commencing at 9:15 a.m., before
25 Tammy Jones, Certified Shorthand Reporter in and for
 the State of Iowa.

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PETER THORNE, M.S., PH.D.

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1 J U N E 6, 2 0 0 6

2 (Thorne Exhibits 1 and 2 were marked
3 for identification.)

4 PETER THORNE, M.S., PH.D.,

5 being first duly sworn, was examined and
6 testified as follows:

7 EXAMINATION

8 BY MR. DUHAMEL:

9 Q. Good morning, Dr. Thorne.

10 A. Good morning.

11 Q. My name is Marcel Duhamel. I represent the
12 Defendants in this case in which I understand you
13 have proffered an expert opinion to the Plaintiffs.
14 Is that correct?

15 A. Correct.

16 Q. Doctor, we're taking this deposition by
17 video conference today, and as I'm sure you've
18 noticed, there seems to be a bit of a transmission
19 delay, maybe a couple of seconds. So what I'm going
20 to ask is, after I ask a question, if you would pause
21 for a moment before you begin to answer it to ensure
22 that I have finished speaking and to give your
23 Counsel a chance to object, if he feels it's
24 appropriate you do that. Is that okay?

25 A. Yes.

1 Q. And I'm going to do my best to pause before
2 I begin speaking after you finish a sentence, so that
3 I avoid speaking over you. All right?

4 A. Fine.

5 Q. If at some point I should speak over you,
6 please let me know. Raise your hand or do something
7 to indicate that I interrupted you, because I do not
8 intend to do that, and I do want you to be able to
9 answer every question fully. Okay?

10 A. Yes. And I will also do my best not to
11 interrupt you.

12 Q. Fair enough. Thank you.

13 Doctor, I gather you have testified before;
14 is that correct?

15 A. Yes.

16 Q. Very briefly, as I'm sure you're aware, the
17 court reporter is taking down what we say. It would
18 be helpful if you would confine your responses to
19 verbal responses, rather than shrugs of the shoulders
20 or statements like "uh-huh" or "huh-uh." Is that all
21 right?

22 A. Yes.

23 Q. If I ask you a question and you do not know
24 the answer, an "I don't know" is, of course, a
25 perfectly accepted response. All right?

1 A. Yes.

2 Q. And, of course, if you don't remember the
3 answer, simply tell me, "I don't remember," and
4 that's also perfectly acceptable. Okay?

5 A. Right.

6 Q. If I ask a question, as is likely, that you
7 don't understand, please do not answer it until you
8 ask me to rephrase it and I have articulated the
9 question in a way that you understand. Is that fair?

10 A. That's fair.

11 Q. If you do answer a question that I've
12 asked, the record will assume that you understood it
13 and you intended to answer it the way you answered
14 it. Is that fair?

15 A. Yes.

16 Q. Doctor, are you taking any medication, or
17 do you have any medical condition that would impair
18 your memory or your ability to concentrate or to give
19 accurate testimony today?

20 A. No.

21 Q. Doctor, before the deposition began, we
22 marked Exhibit 1. Could you locate that and tell me
23 what it is?

24 A. Exhibit 1 is an expert report that I
25 prepared for the purposes of this case.

1 Q. I would like you to turn to Page 2 of
2 Exhibit 1. I should have thought of this before we
3 marked it, but I didn't. Is Page 2 the substitute
4 page that you sent after preparation of the report?

5 A. In the report that's marked Exhibit 1, the
6 Page 2 is as originally submitted, and then affixed
7 to the end of it is the substitute Page 2 that was
8 submitted after the initial report.

9 Q. Okay. When did you submit the substitute
10 page to your -- to Counsel for the Plaintiffs?

11 A. I'm not certain of the date, but it was
12 perhaps within two months of the initial submission.
13 I could check that date for you, if you would like.

14 Q. Well, let's put it this way. What caused
15 the substitution? Did you notice that something
16 needed to be changed to your report?

17 A. In reexamining the report subsequent to the
18 initial, when I came back to the report and in
19 discussions I was having about the content of my
20 report and the case, it was noted both by me and by
21 one of the associates in Dr. Altman -- or
22 Mr. Altman's firm that under B it was a bit ambiguous
23 the way I had initially written it. And so I simply
24 offered to clarify that language when it was pointed
25 out to me that it was not as clear as it could have

1 been. So to answer, I noticed the problem in
2 discussions with it, and I offered to put in a
3 substitute page, and I subsequently did so.

4 **Q. Could you summarize for me what the**
5 **material differences are between the substitute page**
6 **and the original page?**

7 A. Yes. It's very simple. The substitute
8 page describes what is known as a DNAPL, and the
9 initial page did not mention DNAPLs as a class of
10 chlorinated solvents or a designation of chlorinated
11 solvents.

12 MR. ALTMAN: Marcel, Dave Altman.

13 MR. DUHAMEL: Yes.

14 MR. ALTMAN: Could you read back --
15 could the court reporter read back what Dr. Thorne
16 said? I was interrupted by my office asking about
17 those exhibits -- and just the part where you asked
18 him the question, why did you make the changes or
19 whatever that question was?

20 (The reporter read the requested
21 portion of the record.)

22 MR. ALTMAN: Thank you.

23 **Q. (BY MR. DUHAMEL) Doctor, is the language**
24 **under Paragraph B before Item B(1) the only language**
25 **that changed in your report?**

1 A. Yes.

2 Q. Prior to the deposition, we marked
3 Exhibit 2. I would like you to locate this and
4 identify it for me, if you would.

5 A. Exhibit 2 is a copy of my Curriculum Vitae
6 submitted at the time I was contacted about serving
7 as an expert in this case.

8 Q. I notice it indicates that it was prepared
9 on August 18, 2005. Is that accurate?

10 A. Yes.

11 Q. Have there been any significant changes or
12 additions to your Curriculum Vitae since the date on
13 which you prepared Exhibit 2?

14 A. There are five subsequent Curriculum Vitae's
15 since this time as it's constantly being updated to
16 reflect additional teaching, new grant support and
17 further publications. It's an ongoing process.

18 Q. Are you able, sitting here today, to
19 identify for me the additional publications since
20 August 18, 2005?

21 A. No. And the reason is that there -- I
22 typically have about 16 -- 10 to 16 publications per
23 year at this point in my career, and I can't offer
24 those full citations off the top of my head. I'd be
25 happy to provide them for you.

1 Q. Well, that's reasonable, and I will ask
2 that you provide them, if you would be willing to do
3 so.

4 A. Certainly.

5 Q. Doctor, your Curriculum Vitae --

6 MR. ALTMAN: Peter --

7 THE WITNESS: Yes.

8 MR. ALTMAN: You provide those to me,
9 and we will provide them to Marcel.

10 THE WITNESS: I understand.

11 Q. (BY MR. DUHAMEL) Doctor, if you could turn
12 to Page 51 of your Curriculum Vitae?

13 A. (Pause.)

14 Okay.

15 Q. Beginning on Page 51 and continuing onto
16 Page 52, there is a list under the subject
17 Professional Consulting or Services as Expert
18 Witness. Do you see that list?

19 A. Yes.

20 Q. Is that list up to date?

21 A. Yes.

22 Q. There are a few entries on this list I'd
23 like to ask you some specific questions about. The
24 first one is on Page 52, and it shows a range from
25 1997 to 1999, and it indicates Altman & Calardo Co.,

1 **Cincinnati, Ohio. Do you see that?**

2 A. Yes.

3 **Q. Can you describe for me the services that**
4 **you were providing under that entry?**

5 A. Yes. I served as an advisor on some legal
6 matters as well as serving as an expert on a case
7 during that time.

8 **Q. Which case did you serve as an expert on**
9 **during that time?**

10 A. (Pause.)

11 I'm pausing to see if I can remember the
12 name of the case.

13 (Pause.)

14 I don't remember the name of the case at
15 this point.

16 **Q. Do you recall if he represented a plaintiff**
17 **or a defendant?**

18 A. I don't remember which case it was, so I
19 don't know.

20 **Q. It also said you provided some consulting**
21 **in addition to the expert testimony; is that correct?**

22 A. Yes.

23 **Q. Could you describe what you meant by that?**

24 A. My recollection is that at that time, there
25 were some legal matters that Mr. Altman would contact

1 me about from time to time and ask for some expertise
2 in toxicology in terms of matters that he was
3 considering.

4 **Q. You did not provide expert reports as a**
5 **result of those consultations?**

6 A. No.

7 **Q. Okay. A few entries down, there's another**
8 **entry, 2000 to 2006, D. David Altman Co., Cincinnati,**
9 **Ohio. Do you see that?**

10 A. Yes.

11 **Q. First of all, is the D. David Altman in**
12 **that entry the same as the Altman in the entry we**
13 **were discussing a moment ago?**

14 A. Yes.

15 **Q. Could you describe for me the work that you**
16 **did with respect to that second entry?**

17 A. The work was similar to what we just
18 described in terms of occasionally answering
19 questions that he would pose regarding matters of
20 toxicology interest, and in addition to that, I
21 served on one case as an expert witness where I
22 offered a deposition.

23 **Q. Which case was that?**

24 A. It was a case referred to as Cornett versus
25 Welding Alloys, Incorporated.

1 **Q. And that's reflected on your CV; is that**
2 **correct?**

3 A. Yes, it is.

4 **Q. At what page?**

5 A. It's Exhibit 1, Page 11. I'm sorry. Did
6 you say "CV"? It's in my report, which is Exhibit 1.

7 **Q. Okay. All right. It's not on your CV, per**
8 **se, but it is on Exhibit 1; is that correct?**

9 A. Correct.

10 **Q. Okay. What kind of case was that?**

11 A. Can you clarify what you mean by "what kind
12 of case"?

13 **Q. Do you recall what the issues in that case**
14 **were?**

15 A. Yes, I do. There was --

16 **Q. What were those issues?**

17 A. The case involved a manufacturing facility
18 that was adjacent to a property, and there were
19 concerns among the owners of that property of
20 materials coming from the manufacturing facility to
21 their property and the fact that there wasn't proper
22 notification to responsible authorities with regard
23 to environmental regulations -- environmental
24 regulations, and there was also concern about the
25 contaminants causing adverse health effects among

1 residents living in that vicinity.

2 **Q. If I understand correctly, you were deposed**
3 **in that case?**

4 A. Yes.

5 **Q. Do you recall the substance of the opinion**
6 **you rendered in that case?**

7 A. My recollection is that I offered specific
8 information about the toxicologic properties of the
9 materials that were in use at that facility and
10 materials that were identified off site from that
11 facility on adjacent properties.

12 **Q. Did you render any opinion in that case as**
13 **to whether any individual in fact had suffered any**
14 **adverse health effect as a result of exposure to any**
15 **substance?**

16 A. There were medical experts involved with
17 that case that offered medical opinions regarding the
18 health consequences of exposures. I was offering
19 expert opinion on the toxicologic properties of those
20 materials and their movement via aerosol transport.

21 **Q. So if I understand correctly -- and please**
22 **tell me if this is not correct -- you were not**
23 **expressing any opinion as to whether anyone had been**
24 **exposed to those chemicals or had suffered an adverse**
25 **effect as a result of the exposure, but, instead,**

1 **were expressing an opinion as to what the potential**
2 **toxicological effect of exposure could be?**

3 A. I was offering an opinion both regarding
4 the toxicologic properties and their effects and
5 transport of materials via aerosol transmission, so
6 that would be an exposure pathway. I did not examine
7 the patients, nor did I offer a medical opinion based
8 on examining a patient.

9 **Q. How were the substances at issue in that**
10 **case transported off the site of the manufacturer?**

11 A. One of the principal manners by which the
12 materials were transported off site was via air
13 emissions from the facility that were coming from a
14 variety of industrial processes at that facility, and
15 that was the area that I was primarily concerned with
16 from a toxicologic standpoint.

17 **Q. Did you address, in the opinion you**
18 **rendered in that case or in your testimony, transport**
19 **through groundwater?**

20 A. No, I don't believe so.

21 **Q. Did you end up testifying at trial in that**
22 **matter?**

23 A. I did not.

24 **Q. There is one entry on Page 11 of Exhibit 1**
25 **above Cornett versus Welding Alloys. That's Sherlock**

1 **Homes versus Margaret Nims. Do you see that?**

2 A. Yes.

3 **Q. First of all, was that trial testimony or**
4 **deposition testimony or both?**

5 A. Trial testimony.

6 **Q. Had you been deposed in that matter?**

7 A. No.

8 **Q. Who retained you to testify in that case?**

9 A. The firm representing a business referred
10 to as Sherlock Homes.

11 **Q. What was the nature of the dispute, if you**
12 **recall?**

13 A. Sherlock Homes is a company that sells
14 manufactured housing. And they had entered into a
15 contract with Mrs. Nims to purchase a dem- -- a demo
16 or a lot model of a manufactured home, which was then
17 delivered to her and put on the property that she had
18 so designated. She then refused to pay for that
19 delivery and for the home on the basis that she felt
20 she was exposed to formaldehyde from that home. And
21 she had not understood that there were warnings
22 placed about formaldehyde exposure, and there was
23 debate within the trial over whether or not she was
24 made aware of that properly or not. And as I
25 understood it, the company was seeking payment for

1 delivery of that home and for a portion of its use.

2 **Q. What was the nature of your testimony in**
3 **that case?**

4 A. I testified with regard to the potential
5 health effects of formaldehyde exposure, formaldehyde
6 exposures typically seen in manufactured housing over
7 time, industry standards regarding the manufacture of
8 plywood and particle board with regard to
9 formaldehyde emission and formaldehyde exposures
10 among people who smoke cigarettes.

11 **Q. Was the defendant in this case a smoker?**

12 A. Yes.

13 **Q. And did you express any substantive**
14 **opinions through your testimony?**

15 A. Yes, I did. I expressed the opinion that
16 this particular manufactured home, having been on the
17 lot for about a year's time, would have off-gassed
18 formaldehyde and would have a lower amount of
19 airborne formaldehyde than would a newly-manufactured
20 home. I also expressed the opinion that based on
21 published information and data available, generally,
22 that the exposures she would be likely to attain from
23 entering that home for one hour would be considerably
24 less than she would receive from smoking two packs of
25 cigarettes per day.

1 Q. Let me state this as a proposition and see
2 if you would agree with it based, at least in part,
3 on the description of the opinion that you rendered
4 in the Sherlock Homes case. Would you agree that a
5 substance's potential toxicological impact on human
6 health depends, at least in part, on how the people
7 or person in question is exposed to the substance and
8 at what dose and over what period of time?

9 MR. ALTMAN: Objection.

10 A. Are you speaking generally, or are you
11 speaking specifically with regard to the Sherlock
12 Homes versus Nims case?

13 Q. **I'm speaking generally.**

14 A. Okay. So we're not talking about --

15 MR. ALTMAN: Wait a minute, Peter.
16 Peter.

17 THE WITNESS: Yes.

18 MR. ALTMAN: Continuing objection.

19 Go ahead.

20 Continuing objection.

21 Go ahead.

22 A. So as I understand the question that you've
23 asked me, you've asked if -- are you referring to
24 exposure to a single compound, or are you referring
25 to exposure to an array of compounds in a complex

1 mixture? Can you clarify that for me, please?

2 Q. (BY MR. DUHAMEL) Sure.

3 Let's start by asking the question with
4 respect to exposure to a single compound.

5 A. Okay. Such as perhaps --

6 MR. ALTMAN: Continuing -- Peter,
7 pause. Continuing objection.

8 Go ahead.

9 A. Well, of course, exposures to an individual
10 compound are a very rare event in the real world and
11 when we're talking about exposures to people. If
12 you're talking about perhaps a laboratory rat or a
13 laboratory mouse, where you can control everything
14 exposed to an individual substance, in some cases,
15 the route of exposure will make a difference, and in
16 some cases, it does not. It will depend upon the
17 compound. In the real world, where you have exposure
18 to complex mixtures with people who are not
19 genetically identical, there will be individual
20 susceptibilities. There will be also -- which are
21 partially genetically determined. Also,
22 susceptibility is determined by the age of the
23 individual, in some cases their gender, underlying
24 health problems. And when they're exposed to an
25 array of compounds, exposure to one can certainly

1 affect the response to another.

2 **Q. Have you ever published on that subject,**
3 **expressing that view?**

4 A. Yes.

5 **Q. Could you identify for me those**
6 **publications?**

7 A. Well, the one that comes to mind first is a
8 textbook. It's called -- it's referred to as
9 Casarett & Doull's Toxicology, "The Basic Science of
10 Poisons," and it's in its sixth edition, and I
11 published a chapter in that textbook on occupational
12 toxicology. And in that chapter, I created a diagram
13 which indicates a pathway from exposure to response
14 and indicates underlying susceptibility factors and
15 the influence of co-exposures to agents. There are
16 other examples in my publications over the years, but
17 that's perhaps the most direct.

18 **Q. Other than the two pieces of testimony**
19 **history on Page 11 of Exhibit 1, have you provided**
20 **any other testimony as an expert witness in the last**
21 **five years?**

22 A. No.

23 **Q. How about in the last ten years?**

24 A. I believe I was deposed in one other case
25 nearly ten years ago, and I'm afraid I don't remember

1 the particulars of that case, as I sit here now.

2 **Q. Do you know if you have ever testified on**
3 **behalf of a defendant?**

4 A. (Pause.)

5 I see that Mr. Altman is answering the door
6 here, so I'll pause a moment for him.

7 MR. ALTMAN: Thank you very much. I am
8 back at the table.

9 A. Okay. I will resume.

10 I have served as an expert for defendants.
11 I don't believe that I've been deposed in any of
12 those cases or given testimony at trial.

13 **Q. Did you say --**

14 MR. ALTMAN: Marcel, excuse me.

15 Peter, I'll instruct you to review with
16 both Counsel whether any information, unless you know
17 sitting there, can be provided on those cases where
18 you've been a consultant. I don't want you to
19 prejudice whatever those matters are, and so I'm
20 going to ask you to be cautious concerning any
21 specific answers.

22 THE WITNESS: Yes, I understand that.

23 Thank you.

24 **Q. (BY MR. DUHAMEL) Doctor, are you able --**
25 **well, why don't we do it this way. If you could look**

1 **at Pages 51 to 52, Exhibit 2?**

2 A. Yes.

3 Q. **If we could just go through the list, and**
4 **if you could identify for me, one at a time, which of**
5 **the entities -- or, rather, what you did for each of**
6 **those entities, I would appreciate it.**

7 A. Starting with 1982?

8 Q. **Yes, please.**

9 A. I may not be able to remember all of them,
10 but I will certainly do my best.

11 It begins with 1982, Union Carbide
12 Corporation. I was a graduate student at the time,
13 and I worked with a professor. And we were
14 considering the degradation of aldicarb in soil.

15 1982, Kikkoman Foods, Incorporated,
16 Walworth, Wisconsin. This is a manufacturer of soy
17 sauce, among other things. And they were interested
18 in creating a low-sodium soy sauce. And so we
19 designed a process that would exchange potassium for
20 sodium, and I tested some of the materials that would
21 be used in that process for compliance with FDA
22 guidelines on materials that come in contact with
23 food. And, again, that was under the guidance and
24 collaboration of a professor I was working with.

25 Union Carbide Corporation, 1983 to '87.

1 This was then a follow-up study on aldicarb
2 degradation in various types of soils, depending upon
3 whether they had bacteria in the soil or whether they
4 were sterile.

5 1985, Environmental Quality Associates.

6 This was some work done on an indoor air quality
7 problem, and I performed some analysis of samples.

8 1986 to 1987, Proctor & Gamble Company,
9 Cincinnati, Ohio. I worked as a consultant to
10 Proctor & Gamble in their toxicology division. They
11 were trying to set up an animal testing system for
12 looking at respiratory allergy. I had developed such
13 a system in my post-doctoral studies at Pittsburgh,
14 and so I was setting up and troubleshooting a system
15 for them to use for their testing.

16 1988, Duquesne Light Nuclear Group,
17 Incorporated, Shippingport, Pennsylvania. This was a
18 power generating facility that had an indoor air
19 quality problem with their ventilation system where
20 it was contaminated with microorganisms. I
21 determined what the problem was and guided them on
22 solving their problem.

23 Emilcott Associates, Incorporated, Madison,
24 New Jersey, 1989. This was a consulting firm, and
25 they were working in indoor air quality problems, I

1 believe. And if I remember right, I analyzed samples
2 for them as part of one of their investigations of a
3 sick building.

4 1990, State of Iowa, Department of Natural
5 Resources. In this case, I was involved with issues
6 having to do with permitting of facilities and how
7 modeling -- plume dispersion modeling would be used
8 in order to determine compliance with state law.

9 **Q. Can I interrupt for one second?**

10 A. Yes.

11 **Q. Going back to that, when you say you were**
12 **modeling plume dispersion, could you be more**
13 **specific? What were you talking about?**

14 A. If I said I was modeling plume dispersion,
15 I apologize. I don't think I said that. What I was
16 doing was sitting on an expert panel that was helping
17 the State and the regulated community consider models
18 for plume dispersion modeling of facilities that
19 generated air pollution. And as I recall, the issue
20 was which models that had been developed would be
21 acceptable for permitting purposes. And so I was
22 part of an expert panel that was listening to that
23 and offering guidance on specific issues.

24 **Q. Thank you. Please continue.**

25 A. Okay. I believe I was at 1990,

1 S.C. Johnson & Sons, Incorporated, Racine, Wisconsin.
2 S.C. Johnson & Sons was concerned with issues of
3 allergy, allergic contact dermatitis specifically,
4 which is a contact allergy that one can attain from
5 certain types of consumer products that might be
6 applied to the skin, such as shampoos, cosmetics, in
7 some cases dermally applied medicine. And they were
8 interested in having a way to test these in mice to
9 determine if perfumes, preservatives or other
10 components would induce toxic effects. And I worked
11 with them to develop a mouse method for testing for
12 allergic contact dermatitis.

13 Allied Products Corporation, Chicago,
14 Illinois, 1990. I'm not certain on this one. I --
15 my recollection is that this may have been an injury
16 of an employee and a workplace evaluation, but I'm
17 not -- I don't recollect that one clearly anymore.

18 Iowa Beef Processors, Incorporated, was a
19 worker injury and consultation on that particular --
20 the circumstances that led to that injury.

21 1991, CNA Insurance Company was also a
22 worker injury case, and I offered some information
23 regarding the toxic properties of the compounds that
24 were under question.

25 Green Environmental Services, Cedar Rapids.

1 My recollection is, this had to do with using
2 railroad ties for landscaping and questions about the
3 properties of some of the materials that are used to
4 coat railroad ties.

5 1995, Habush, Habush, Davis & Rottier,
6 Madison, Wisconsin, is a law firm. And they were
7 representing a firm that supplied hay to a dairy
8 farmer and asked for an opinion with regard to the
9 properties of microbial contaminants and micro-toxins
10 in green feed hay and so forth.

11 1995, Smith, McElwain & Wengart Law
12 Offices, Sioux City. I don't remember this one at
13 all, I'm afraid to say, so I don't remember what that
14 was about.

15 1995, Castrol Industrial of North America.
16 They are a manufacturer of metalworking fluids which
17 are used for processing cast metal into finished
18 products, such as engine blocks and transmissions.
19 And I had done a number of research studies on the
20 health of machinists exposed to metalworking fluids.
21 And I was consulting with them on formulation of some
22 of their products.

23 We've talked briefly about the next entry,
24 '97 to '99.

25 1998, Hoogovens, IJmuiden, The Netherlands.